Sokolow-Lyon Voltage, Cornell Voltage or Cornell Voltage Products. ECGs showing atrial fibrillation/flutter or having a wide QRS (>120 ms) that prevent an accurate QT measurement were excluded from the study. Comparisons were made between ALQTS and control groups for R and S wave amplitudes, QTc (by Bazett's), presence of ST depression (≥0.05 mV) and T wave (ST-T) abnormalities in the left precordial leads and limb leads.

RESULTS 1) In ALQTS associated with HTN-LVH, QTc was moderately prolonged (479±35 ms vs. 421±16 ms, $p < 0.0001$). 2) Compared to the HTN-LVH patients with a normal QT interval, ALQTS subjects displayed a deeper S wave in V1 and V3 (SV1: 1.6±0.7 mV vs. 1.3±0.5 mV, $p < 0.01$; SV3: 1.6±1.0 mV vs. 1.2±0.7 mV, $p < 0.01$), and a greater valve of Cornell Voltage Product (2532±1075 mm*ms vs. 2042±911 mm*ms, $p < 0.001$), respectively. 3) More patients in ALQTS group had ST-T abnormalities (53% vs 35%, $P < 0.01$) with an odds ratio of 2.1 (95% confidence interval 1.2-3.6).

CONCLUSIONS Patients with ALQTS due to HTN-LVH have a higher QRS amplitude and more frequent ST-T abnormalities. This finding suggests 1) repolarization abnormalities secondary to the increased ventricular mass may be the underlying cause of QT prolongation in HTN-LVH; and 2) presence of a prolonged QT interval may be an indicator that hypertensive left ventricular hypertrophy is more severe than those without QT prolongation.

GW26-e3881

Prevalence and metrics distribution of ideal cardiovascular health: A population-based, cross-sectional study in rural China

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OBJECTIVES The American Heart Association (AHA) recently introduced definitions of "ideal," "intermediate," and "poor" cardiovascular health (CVH) based on 7 cardiovascular health metrics (smoking, body mass index, physical activity, diet score, total cholesterol, blood pressure, and fasting glucose). This study used this construct to assess the prevalence and metric distribution of CVH in a rural population with traditional lifestyles.

METHODS From January 2012 to August 2013, a representative sample of 11113 adults (mean age 53.8±10.6 years; 53.8% women) was enrolled from a rural population in Northeast China using a multi-stage, stratified randomly cluster-sampling scheme.

RESULTS According to the adjusted AHA criteria for CVH health metrics, there was 2.7% prevalence of ideal CVH (all 7 health metrics at ideal levels), 21.4% of intermediate CVH (at least 1 health metric at intermediate level, but no poor health metrics), and 75.9% of poor CVH (at least 1 of 7 health metrics at poor level). Women and young/middle-aged adults were more likely to have all of the ideal CVH metrics, behaviors, factors and CVH status.

CONCLUSIONS This first population-based study in a rural population (northeast China) using the adjusted AHA criteria for CVH showed extremely low (2.7%) and high (75.9%) prevalence of ideal and poor CVH, respectively. The poor CVH status, particularly among men and older individuals, underscores need for urgent action on modifiable risk factors, especially blood pressure and smoking.

GW26-e0094

Gender difference in risk factors for coronary heart disease diagnosed by coronary arteriography

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OBJECTIVES As we all known that smoking, hypertension, diabetes, hyperlipidemia and family history of premature cardiovascular disease were major risk factors for coronary heart disease. Whether those risk factors have different effects on different gender? Certain studies had analyzed it, however, the scale of these studies were small. In order to overcome the shortcomings, this observational study included 1700 patients to explore whether those risk factors play different role on male and female patients of CHD diagnosed by coronary arteriography for the first time.

METHODS From 2009-01-01 to now, 1700 cases were collected from Guangdong General Hospital and Guangdong Provincial Hospital of Chinese Medicine, The demographic data were collected at the first two days.

RESULTS The rates of traditional CHD risk factors including hypertension, DM, obesity, smoking and CHD family history in male patients were 21.5%, 21.5%, 10.0%, 96.7%, 0.02% respectively, while those in female ones were 28.8%, 28.6%, 7.5%, 2.4%, 0.01% respectively. The incidence rates of hypertension, obesity, CHD family history and the HDL-C, TG, apoA, apoB, LPa levels showed no difference between different genders, while risk factors as well as the incidence rates of DM and the LDL-C and TC level were more higher in female CHD patients than those in male ones ($p=.014$, $p=0.003$, $p=0.008$). In addition, the population composition between two genders was also different. The most part in male CHD patients were old-aged group, while in male population, middle-aged patients account for a large proportion of female CHD patients.

CONCLUSIONS The CHD risk factors between different genders are very. DM, the serum LDL-C and TC level play a more important role in female CHD patients, unlike it, smoking was the main risk factor for male patients. The morbidity rate is higher in female than male patient in old group.

GW26-e0380

Positive relationship between mortality and severity of chronic kidney disease and peripheral arterial disease in Chinese hypertension population

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OBJECTIVES Chronic kidney disease (CKD) and peripheral arterial disease (PAD) independently predict poor prognosis. The purpose of this study were to estimate the combined effect of CKD and PAD on all-cause and cardiovascular disease mortality and investigate whether a linear relationship exists between the mortality and the severity of both CKD and PAD in Chinese hypertensive population.

METHODS A total of 2931 hypertensive patients with available records were enrolled in 2004 and implemented the follow-up visit in 2010. The presence of PAD was assessed based on the ankle-brachial index (ABI) and renal function was evaluated using estimated glomerular filtration rate (eGFR). Patients were categorized into groups for different research purposes according to their CKD and PAD status.

RESULTS Patients with both CKD and PAD had the highest all-cause and CVD mortality (49.8% and 29.2%) as well as increased odds for death, compared with patients with CKD alone (29.0% and 15.7%), PAD alone (31.9% and 18.1%), and neither condition (20.2% and 9.4%). After adjustment for conventional cardiovascular risk factors, the Cox regression model further identified that the mortality risk increased as either or both ABI and eGFR decreased. Patients with ABI≤0.70 and eGFR 15-29.9 ml/min per 1.73m^2, had an more than five-fold increased risk for all-cause death and an approximately five-fold increased risk for CVD death compared with no disease group (RR: 5.543 and 4.997).

CONCLUSIONS The combination of CKD and PAD multiplicatively increased the mortality risk for all-cause and CVD death in hypertensive individuals. And a positive correlation was further confirmed between the mortality risk and severity of both PAD and CKD.

GW26-e3819

Association of matrix metalloproteinase-1 -519A/G polymorphism with acute coronary syndrome: a meta-analysis

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OBJECTIVES Matrix metalloproteinase-1 (MMP-1) has been demonstrated to play an important role in the development and progression of acute coronary syndrome (ACS). Recent studies have shown that MMP-1 -519 A/G (rs1144393) polymorphism is associated with the susceptibility to ACS. However, published studies showed inconsistent results.

METHODS A meta-analysis of eligible studies reporting the association between -519 A/G polymorphism and ACS was carried out. A systematic search was conducted using PubMed, Web of Science, Cochrane Library, Chinese National Knowledge Infrastructure and Chinese Wan Fang database.

RESULTS Six eligible studies involving 5670 subjects (2868 ACS patients and 2802 healthy controls) were included in this meta-analysis. Overall, this meta-analysis showed a significant association between the rs1144393 polymorphism and ACS (A vs. G: OR =1.385, 95% CI =1.019-1.882, P =0.037; AA vs.AG/GG: OR =1.547, 95%